THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte LUIGI CELLONE, BRUNELLA FORNASARI,
CAIRO MONTENOTT and GIOVANNI GIUSTO

_____

Appeal No. 1997-0195
Application 08/126,897[1]

_____

ON BRIEF

_____

Before WINTERS, WILLIAM F. SMITH and OWENS Administrative Patent Judges.

WINTERS, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 1 through 19, all of the pending claims in this application.

[1]Application filed Sep. 27, 1993.

Claim 1 is illustrative of the subject matter on appeal and reads as follows:

1. A photographic assemblage comprising:

a silver halide photographic light-sensitive element comprising at least one sulfur and gold sensitized silver halide emulsion layer, said element comprising chlorinated s-triazine hardeners and chemical compounds containing cyano groups, and

a closed vessel in which the element is closed and stored at a constant relative humidity,

characterized in that the element contains, in a silver halide emulsion layer and/or an adjacent layer thereto, divalent or tetravalent palladium salt as scavenger for HCN gas released from the element.

I. References

The references relied on by the examiner are:

Kadowaki et al. (Kadowaki)	4,618,570	Oct. 21, 1986
Harbison et al. (Harbison)	4,892,808	Jan. 9, 1990
European Patent Application (Ikenoue)	0,439,069 A2	Jul. 31, 1991

Patent Abstracts of Japan, ABS Grp No. P654, Vol. 12, No. 8 (Jan. 12, 1988), abstracting Japanese Patent No. 62-168,143 (Ishikawa).[2]

[2]Although the statement of rejection in the Examiner's Answer refers to Japanese Patent 62-168,143, the examiner relies only on the Patent Abstract and appellants' description of the Japanese patent at page 2, lines 1-5, of the instant specification. Examiner's answer, page 4, lines 13-17. The Patent & Trademark Office translation is not of record in this application. Under these circumstances, we have not reviewed the contents of the Japanese patent or of the translation. Rather, our review has been restricted to the abstract and the description in the instant specification of the Japanese patent.

Appellants' description of Ishikawa at page 2, lines 1-5, of the instant specification.

II. Rejections[3]

The claims stand rejected under 35 U.S.C. § 103 as follows: (a) claims 1 through 7 and 11 through 17 over Harbison in view of Kadowaki and the abstract and appellants' description of Ishikawa; and (b) claims 8 through 10, 18, and 19 over Harbison in view of Kadowaki, the abstract and appellants' description of Ishikawa, and Ikenoue.

On consideration of the record, we reverse these rejections.

III. Discussion

A. The rejection under 35 U.S.C. § 103 over Harbison in view of Kadowaki and the abstract and appellants' description of Ishikawa.

1. The claims on appeal are directed to a photographic assemblage comprising a silver halide photographic element stored in a closed vessel at a constant relative humidity. The silver halide photographic element comprises: (1) at least one sulfur and gold

[3]The rejection under 35 U.S.C. § 112, fourth paragraph, set forth in the Final rejection, Paper No. 7, mailed May 9, 1995, has been withdrawn by the examiner. See Examiner's answer, Paper No. 19, mailed Mar. 19, 1996. The rejections under 35 U.S.C. § 112, second paragraph, set forth in the Examiner's answer at page 6, as new grounds of rejection, have been withdrawn by the examiner in response to the amendment filed Apr. 10, 1996, Paper No. 20. See Supplemental examiner's answer, Paper No. 22, mailed May 10, 1996.

sensitized silver halide emulsion layer; (2) chlorinated s-triazine hardeners; (3) chemical compounds containing cyano groups; and (4) a divalent or tetravalent palladium salt in a silver halide emulsion layer and/or an adjacent layer thereto. The palladium salt scavenges HCN gas released by the element.

2. Harbison discloses a photographic assemblage comprising a light-sensitive photographic element that comprises a support bearing a silver halide emulsion layer and an associated non-light sensitive material comprising a support containing carbon black. Column 2, lines 6-11. The silver halide emulsion layer can comprise gold and sulfur sensitized silver halide emulsions. Column 4, lines 20-23. The assemblage further comprises a noble metal scavenger for HCN gas evolving from carbon black in the associated material. Column 2, lines 12-18. The scavenger includes divalent and tetravalent palladium salts. Column 2, lines 40-42, and 45-46.

3. According to Harbison, it is critical that the scavenger be located in the assemblage where it intercepts HCN gas evolving from carbon black before the gas reaches the silver halide in the light-sensitive element. Column 2, lines 12-16; and column 3, lines 3-7; and claim 1. Harbison teaches that the scavenger should not have a deleterious effect on silver halide or "should be incorporated in such a manner that it does not come into contact with the silver halide layers" (emphasis added). Column 2, lines 26-29. The scavenger can be located in the layer containing carbon black, a layer coated

over the layer containing carbon black, a layer on the opposite side of the support from the layer containing carbon black, or a layer in the photographic element remote from the silver halide emulsion layer. Column 3, lines 7-13.

4. Harbison does not disclose that the photographic element comprises chlorinated s-triazine hardeners or compounds containing cyano groups as recited in claim 1. Nor does Harbison disclose storing the element in a closed vessel at a constant relative humidity as recited in claim 1.

5. Kadowaki discloses that the use of chlorinated s-triazine hardeners (i.e., cyanuricchloride type hardening agents: column 10, lines 39-43) in photographic materials has a great disadvantage. Photographic materials containing chlorinated s-triazine hardeners do not store well, and the sensitivity of the photographic material diminishes with time. Column 1, line 67, through column 2, line 16. Kadowaki teaches that when chlorinated s-triazine hardeners are used in silver halide photographic materials comprising silver halide not sensitized with Kadowaki's sensitizer of formulas (Ia) or (Ib) at column 3, lines 21-68, the sensitivity of the photographic material decreases after one month storage. Examples 8 and 9 in Table III at column 22.

6. Kadowaki discloses a photographic material comprising at least one silver halide emulsion layer that includes silver halide having a silver chloride content of not less than 25 molar% and silver halide sensitized with a compound of formula (Ia) and/or a

compound of formula (Ib). Kadowaki further discloses that the emulsion layer is hardened with a chlorinated s-triazine compound of formula (II) and/or a chlorinated s-triazine compound of formula (III). Kadowaki, column 3, line 10, through column 4, line 37. Kadowaki discloses that the silver halide photographic material exerts good storage property with time or "a lower change in sensitivity after storage." Column 3, line 2-5, and Examples 5, 6, and 10 through 12 in Table III at column 22.

7. The Ishikawa abstract describes storing a photographic element at a relative humidity of at least 55% in a hermetically sealed vessel. Appellants state that Ishikawa reduces fog in light-sensitive elements during storage in a closed vessel by decreasing the humidity in the vessel. Specification, page 2, lines 1-5.

8. In setting forth the rejection under 35 U.S.C. § 103, the examiner characterizes Kadowaki as teaching that triazine hardeners may be used in the presence of a palladium compound. The examiner relies on the description of Kadowaki at column 13, lines 31-37, to support that position. Answer, page 4, lines 18-21. Kadowaki at column 13, lines 31-37, teaches that the silver halide emulsion can be sensitized with a palladium metal sensitizing agent. The examiner concludes that "[i]t would have been obvious to store a photographic element at a constant relative humidity in a closed vessel as taught by Ishikawa . . . wherein the element comprises a palladium compound as hydrogen cyanide scavenger as taught by Harbison . . . since both the constant humidity and palladium

compound reduce fog, and a triazine hardener as taught by Kadowaki . . . may be used in the presence of a palladium compound, with a reasonable expectation of achieving an element having adequately hardened layers and the element having reduced fog." Answer, paragraph bridging pages 4 and 5.

9. A rejection of claimed subject matter under 35 U.S.C. § 103 in view of combined disclosures of prior art references requires consideration of (1) whether the prior art would have suggested making the claimed composition to a person having ordinary skill in the art, and (2) whether the prior art would have revealed that, in so making, a person having ordinary skill would have a reasonable expectation of success. Both the suggestion and reasonable expectation of success must be founded in the prior art, not in applicant's disclosure. See In re Vaeck, 947 F.2d 488, 493, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991). Neither condition is met here.

On this record, we find that the prior art does not provide adequate teaching or suggestion that would have led a person having ordinary skill to use: (1) a palladium salt HCN scavenger "in a silver halide emulsion layer and/or in an adjacent layer thereto" as required in claim 1; or (2) chlorinated s-triazine hardeners in Harbison's photographic element. Harbison, considered in its entirety, teaches away from placing the HCN gas scavenger in a silver halide emulsion layer or in a layer adjacent to the silver halide emulsion layer. In arguing that Kadowaki cures the deficiencies of Harbison, the examiner

ignores Harbison's critical requirement that HCN gas be scavenged before it reaches the silver halide emulsion. Further, Kadowaki teaches away from using chlorinated s-triazine hardeners in silver halide photographic materials to be stored, unless those hardeners are used in combination with Kadowaki's sensitizers having formulas (Ia) or (Ib).

We have no doubt that the prior art could be modified in the manner proposed by the examiner to arrive at appellants' claimed invention. This can be seen from a review of the instant specification and claims. However, the mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). In relying on selected portions of the prior art and ignoring the entire teachings of the prior art, the examiner impermissibly relies on hindsight in reaching the ultimate conclusion of obviousness. "To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." W.L. Gore & Associates. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983).

We also find that the abstract and appellants' description of Ishikawa do not cure the deficiencies of Harbison and Kadowaki.

Accordingly, we reverse the rejection of claims 1 through 7 and 11 through 17 under 35 U.S.C. § 103 as unpatentable over Harbison in view of Kadowaki and the abstract and appellants' description of Ishikawa.

B. The rejection under 35 U.S.C. § 103 over Harbison in view of Kadowaki, the abstract and appellants' description of Ishikawa, and Ikenoue.

1. For the reasons previously set forth, the combined disclosures of Harbison, Kadowaki, and the abstract and appellants' description of Ishikawa fail to suggest appellants' invention recited in claims 1 through 7 and 11 through 17.

2. Ikenoue discloses a silver halide photographic light-sensitive material sealed in a closed vessel that is capable of maintaining a constant relative humidity. The material comprises at least one silver halide emulsion layer containing a gold and chalcogenide sensitized silver halide emulsion. Page 2, lines 42-49; page 3, lines 23-27; and page 86, lines 7-9. To prevent the increase in fog and decrease in gradation of the light-sensitive material, Ikenoue reduces the amount of noxious substances, in particular, HCN gas, released from 1 m^2 of said light-sensitive material. Page 2, lines 39-41 and 45-46; and page 3, lines 23-27. HCN gas is reduced by eliminating the source of the HCN gas, compounds containing cyano groups, from the light-sensitive material; or by limiting compounds containing cyano groups to a minimum number in the light-sensitive material.

Page 4, lines 14-22; page 7, lines 53-56; page 59, line 56, through page 60, line 1; and Tables 2, 3a and 3b, and accompanying text at pages 111, 117, and 118.

3. Ikenoue does not teach the use of chlorinated s-triazine hardeners or palladium salts as scavengers of HCN gas. In fact, Ikenoue discloses that a serious problem of degradation of photographic properties arises when heavy metals, such as palladium, are added to light-sensitive materials as scavengers of noxious substances produced by carbon black used in shading papers of said light-sensitive materials. Page 2, lines 15-25.

4. Thus, Ikenoue does not cure the deficiencies of Harbison, Kadowaki, and the abstract and appellants' description of Ishikawa. Accordingly, we reverse the rejection of claims 8 through 10, 18, and 19 under 35 U.S.C. § 103 as unpatentable over Harbison in view of Kadowaki, the abstract and appellants' description of Ishikawa, and Ikenoue.

IV. Conclusion

In conclusion, for the reasons set forth in the body of this opinion, we reverse the rejections under 35 U.S.C. § 103 of: (a) claims 1 through 7 and 11 through 17 over Harbison in view of Kadowaki and the abstract and appellants' description of Ishikawa; and (b) claims 8 through 10, 18, and 19 over Harbison in view of Kadowaki, the abstract and appellants' description of Ishikawa, and Ikenoue.

REVERSED

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SHERMAN D. WINTERS	)
Administrative Patent Judge	)
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	)
	) BOARD OF PATENT
WILLIAM F. SMITH	)
Administrative Patent Judge	) APPEALS AND
	)
	) INTERFERENCES
	)
TERRY J. OWENS	)
Administrative Patent Judge	)

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